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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,446	08/19/2003	Wolfgang Bredow	MAY-0018	4408

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EXAMINER	
FERGUSON, MICHAEL P	
ART UNIT	**PAPER NUMBER**
3679	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/643,446	BREDOW ET AL.	
	Examiner	Art Unit	
	Michael P. Ferguson	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4 and 9-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4 and 9-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 5-7) recites "the second joint element includes... borings... the borings forming the receptacle for the end sections of the first joint element". Claim 1 (lines 13-14) recites "wherein the first joint element is... shaped such that ring collars are formed, the second joint element bearing against the ring collars". It is unclear as whether the ring collars are formed on the first joint element, or whether the ring collars are formed on the selector pin. It is unclear as to whether the ring collars are separate elements from the end sections of the first joint element, or whether the end sections (or borings) and ring collars are the same structural element. Accordingly, one is unable to determine the metes and bounds of such claim.

Claim 1 (lines 11-12) recites "wherein the seal element spans a common end surface of the joint elements and the ring is sealed there". It is unclear as to how the first and second joint elements can have a common end surface, or how the ring can be sealed at such a surface, since the first joint element and the second joint element are separate elements. It is unclear to what location "there" refers to. It is unclear as to whether the seal extends between the "common end surface" and the ring, or whether

the ring is located on the "common end surface". Accordingly, one is unable to determine the metes and bounds of such claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,2,4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (US 5,738,352) in view of Meyer et al. (US 6,709,183).

As to claim 1 as best understood, Ohkubo et al. disclose a plastic joint comprising:

a selector pin **60** capable of moving around a swivel axis **Y**,

an inner, first joint element **3** being ring-shaped and an outer, second joint element **20** for mounting in a device **4A,4B**, wherein the first joint element includes a first plastic material (inherently) with axially opposite end sections **51,52** (end sections **51,52** function as an integral extension of first joint element **3**), and the second joint element includes a second material **A** (bearing surface **A** in ring **20**; Figure 4B reprinted with annotations below) with borings that lie within the swiveling axis, the borings forming the receptacle for the end sections of the first joint element, and

wherein the first joint element is fixed in a position on the selector in and shaped such that ring collars **B** (annular surfaces **B**) are formed, the second joint element bearing against the ring collars, and

wherein the second joint element is a closed ring shape (Figures 3-4B).

Ohkubo et al. fail to disclose a plastic joint comprising a second joint element including a second plastic material, a ring made of the second plastic material adjacent the first joint element and encompassing (encircling) the selector pin, and a seal element comprised of a film made of thermoplastic polymer and having a restoring function.

Meyer et al. teach a joint comprising a second joint element **7,8** including a second plastic material **11,12** (rubber elastomer pads **11,12**), a ring (defined by the shape of elastomer pads **11,12**) made of the second plastic material adjacent a first joint element **3,4** and encompassing (encircling) a selector pin **17** (via first joint element **3,4**), and a seal element (defined by the bearing surface of elastomer pads **11,12**) comprised of a film made of thermoplastic polymer (rubber elastomer) and having a restoring function (the rubber elastormer being a resilient material); the second rubber elastomer plastic pad material providing for a stronger, more durable joint by absorbing high forces perpendicular to the swiveling axis and permitting large angles of torsion around the swiveling axis (column 1 lines 39-43, Figure 10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. to have a second joint element (bearing surface in ring **20**) including a second rubber elastomer plastic pad material as taught by Meyer et al. to provide for a stronger, more durable joint.

Ohkubo et al. in view of Meyer et al. fail to disclose a plastic joint wherein the second joint element includes longitudinal sides in which the borings are formed and

narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element.

The applicant is reminded that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element as such practice is a design consideration within the skill of the art.

As to claim 2, Ohkubo et al. discloses a plastic joint comprising a selector pin **60** that is equipped on a part of its circumference with profiling (key surface **61A,62A**) in which the first joint element **3** is set, the profiling comprising longitudinal grooves **61A,62A** (Figure 5).

As to claim 4, Ohkubo et al. in view of Meyer et al. fails to disclose a plastic joint wherein the first plastic material is polyoxymethylene, and the second plastic material is polypropylene.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. to have a first

plastic material comprising polyoxymethylene, and a second plastic material comprising polypropylene as such practice is a design consideration within the skill of the art.

As to claim 9, Ohkubo et al. disclose a plastic joint comprising a third joint element **4A,4B** having a second swiveling axis **X** that lies perpendicular to the first swiveling axis **Y**, which engages in end sections **41,42** of the second joint element **20** to form a cardan joint (Figure 3).

As to claim 10, Ohkubo et al. disclose a plastic joint wherein two of the joint elements are combined to form a spherical joint element, which encompasses the selector pin **60** and is held in a retaining element **4A,4B** such that it can swivel in two planes (Figure 3).

As to claim 11, Ohkubo et al. disclose a plastic joint wherein a seal element (inherent; not shown) extends from the selector pin **60** over the retaining element **4A,4B**.

As to claim 12, Ohkubo et al. disclose the use of a plastic joint as a joint in a continuously variable switch in devices for controlling machines (Figure 3).

Response to Arguments

5. Applicant's arguments filed March 6, 2006 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

Ohkubo et al. do not disclose a joint wherein the first joint element includes *axially opposite end sections*.

Examiner disagrees. As to claim 1, Ohkubo et al. disclose a joint wherein the first joint element **3** includes axially opposite end sections **51,52** (end sections **51,52** function as an integral extension of first joint element **3**; Figure 3).

As to claim 1, Attorney argues that:

Meyer et al. do not disclose a joint comprising a ring *encompassing the selector pin*, and a seal element comprised of *a film*.

Examiner disagrees. Meyer et al. teach a joint comprising a ring (defined by the shape of elastomer pads **11,12**) encompassing (encircling) a selector pin **17** (via first joint element **3,4**), and a seal element (defined by the bearing surface of elastomer pads **11,12**) comprised of a film (Figure 10).

As to claim 1, Attorney argues that:

Ohkubo et al. in view of Meyer et al. do not disclose a plastic joint *wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element.*

Examiner disagrees. As to claim 1, the applicant is reminded that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer

diameter of the first joint element as such practice is a design consideration within the skill of the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MPF
05/23/06

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

APPROVED.
MKB
5/22/06

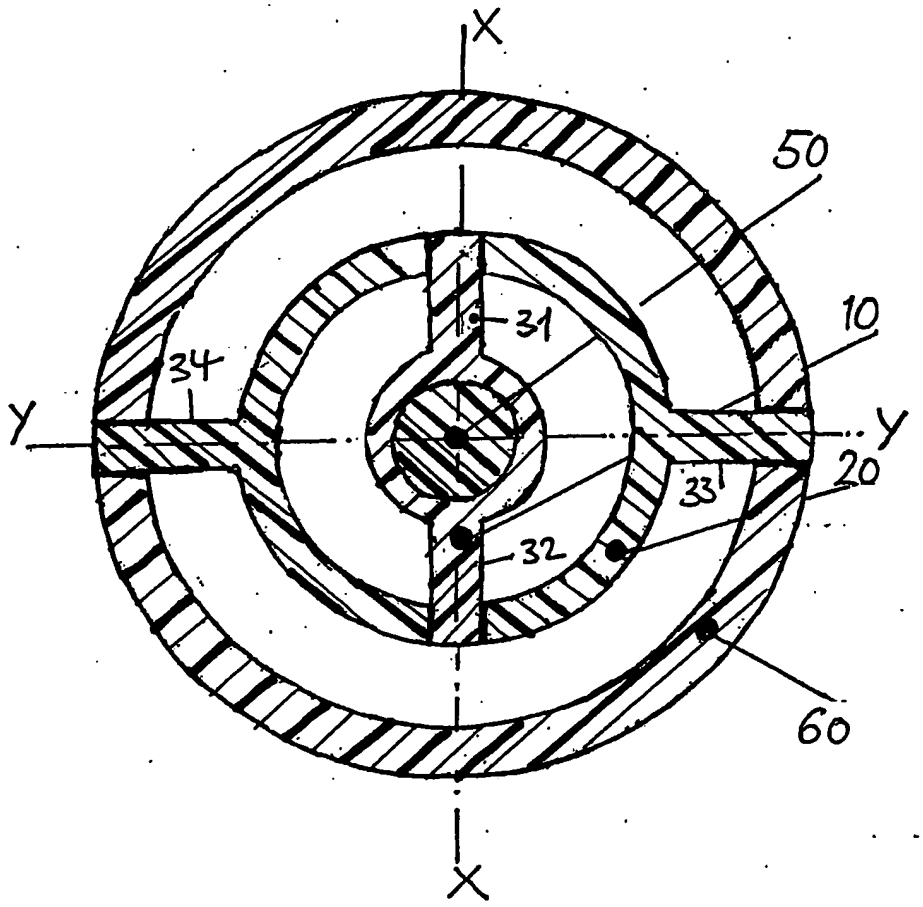

FIG. 7

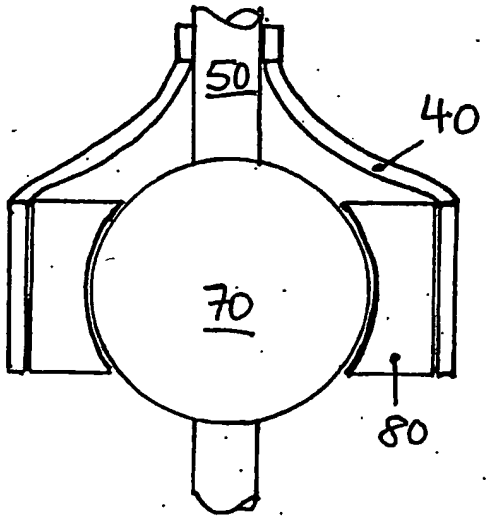

FIG. 8